PESTICIDE HANDLING AND ASSOCIATED HEALTH RISK AMONG AGROCHEMICAL RETAILERS IN OSUN STATE, NIGERIA

Mosudi Sosan, Department of Crop Production and Protection Obafemi Awolowo University,, Nigeria Olufunmilayo Oni, Department of Crop Production and Protection Obafemi Awolowo University,, Nigeria

Background and Aims: In Nigeria, agriculture provides revenue for farmers and field workers. In order to maintain or improve crop yield on both small and large scale farms, agrochemicals are extensively used. The distribution of pesticide for agricultural purposes is mainly through privately owned retailing shops. The aim of the survey was to assess the knowledge, attitude and practice of agrochemical retailers in Osun State, Nigeria with respect to pesticide handling and their associated health risks.

Methods: The study was conducted in retail outlets of agrochemicals in nine towns in Osun state, southwestern Nigeria. A structured questionnaire was used to collect quantitative information from selected agrochemical retailers and supplemented with oral interviews.

Results: Pesticides of different brands comprising organochlorines, organophosphates, carbamates, pyrethroids and fumigants were stocked for sale by the retailers. Personal habits like eating, chewing kolanut and cigarette smoking were observed among the retailers in their shops with Personal Protective Equipments (PPE) not commonly used by them. The various symptoms experienced by some of the retailers include feeling dizzy or dazed (33%), severe headache (26%), feeling weak (23%), nausea (20%) restlessness (20%) among others are all indicators of possible poisoning due to exposure to organophosphate pesticides.

Conclusions: The evidence from this study shows that the retailers were likely to have been exposed to pesticide mainly through inhalation as a result of continuous exposure to these chemicals in the course of running their business. It is suggested that the existing legislation on pesticide registration in Nigeria should be enforced to control the irresponsible marketing strategies by pesticide companies that promote inappropriate purchasing and distribution. Regular training of the retailers on pesticide handling and management by chemical companies should also be emphasized and monitored while regular biological monitoring study to ascertain the exposure level and possible health effects on the retailers are strongly advocated.